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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,325	02/18/2000	Yujin Mori	016907/1050	8856
22428	7590	06/16/2004	EXAMINER	
FOLEY AND LARDNER			REITZ, KARL	
SUITE 500			ART UNIT	
3000 K STREET NW			PAPER NUMBER	
WASHINGTON, DC 20007			2624	
DATE MAILED: 06/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/506,325	MORI, YUJIN	
	Examiner Karl R. Reitz	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 March 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 February 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. Response has been made of record. Claims 1, 4, 5 and 8 have been amended. Claims 1-8 are pending.
2. The objections to the title, body of the specification and drawings of the invention are withdrawn in light of the amendment.
3. The objection to claim 5 is also withdrawn with respect to the amendment.
4. The 35 USC § 112 rejections to claims 4 and 8 are also withdrawn with respect to the amendment.

Response to Arguments

5. Applicant's arguments filed 29 March 2004 have been fully considered but they are not persuasive. Applicant argues that the cited prior art does not setting directions, determining disposing a binding axis in the longitudinal direction given certain orientations of the originals or disposing a binding axis in the transverse direction given other orientations of the originals (page 17 lines 13-26). However, Morikawa clearly shows images set in a portrait of a horizontally positioned original (first set on documents in figure 38), a landscape of a vertically positioned original (second set on documents in figure 38), a landscape of a horizontally positioned original (third set on documents in figure 38), and a portrait of a vertically positioned original (fourth set on documents in figure 38). Moreover, applicant admits that Muramatsu's system inserts the binding margin at the appropriate position even if the system is allowed to automatically detect and set the position (vertical or horizontal) of the originals (page 16 lines 15-25), therefore Muramatsu's system allows automatic setting of the originals and

properly determines the disposition of the binding axis based on the image orientation. Thus, the combination of the references would result in a system with setting means allowing for all the settings disclosed by applicant and the appropriate positioning of the binding axis based on those setting means.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramatsu (5,461,459) and Morikawa (5,649,033).

8. In accordance with claims 1 and 5, Muramatsu discloses an image forming apparatus 1 (figure 1). Muramatsu further discloses that the apparatus scans two originals and forms copy images of each original on both sides, obverse and reverse, of a medium; Muramatsu refers to this mode as one-side original/duplex copy mode (col. 12 lines 16-17). Muramatsu further discloses original documents with main and sub scan directions (figure 20 (a) and col. 2 lines 62-66).

9. Muramatsu further discloses a setting means for setting the scanning direction of the originals; in Muramatsu's system, the CPU 2 controls the main scanning direction and CPU 3 controls the sub scanning direction (col. 5 lines 52-58 and col. 6 lines 3-6).

10. Muramatsu further disclose a determining means for determining disposing a binding axis in a longitudinal direction if the setting means sets the automatic of the

vertically positioned original, the portrait of the vertically positioned original or the portrait of the horizontally positioned original, and determining disposing the binding axis in a transverse direction if the setting means sets the automatic of the horizontally positioned original, the landscape of the horizontally positioned original or the landscape of the vertically positioned original; in Muramatsu's system, binding directions can either be set automatically or automatically, in which the user selects the position and orientation of the binding margin for the portrait and landscape orientations (as shown in figure 3), thus allowing the user to set for the longitudinal direction if the input pages are a vertically positioned original, the portrait of the vertically positioned original or the portrait of the horizontally positioned original, and allowing the user to set for the transverse direction if the input pages are a horizontally positioned original, the landscape of the horizontally positioned original or the landscape of the vertically positioned original.

11. Muramatsu further disclose a second setting means for setting a binding margin; in Muramatsu's system, the CPU 2 controls shifts in the image data to allow for a binding margin (col. 6 lines 43-48).

12. Muramatsu further discloses first scanning means for scanning the first original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads the first original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

13. Muramatsu further discloses first recording means for recording the image data of the first original scanning; in Muramatsu's system, the image processing section 211

receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28). The image data is rotated as needed, so that binding margin can be properly disposed (as shown in figure 24).

14. Muramatsu further discloses first reading means for reading out the recorded image data without rotating the data; in Muramatsu's system, the image data of the first original is read out and sent directly to the print process section 40 without executing the rotation process (col. 11 lines 26-34). Muramatsu further discloses providing the data with a binding margin having a width in the transverse direction on the basis of the binding axis if the binding axis determined by determining means is disposed in the longitudinal direction or providing a binding margin having a width in the longitudinal direction on the basis of the binding axis if the binding axis determined by the determining means is disposed in the transverse direction, the first reading means performing control in reading such that a position of the binding margin on the obverse side is reversed to a position of the binding margin on the reverse side; in Muramatsu's system, when the image is read in, the read start position is changed based on the way the binding margin is specified (as described above), in order to insert space for the binding margin at the appropriate location (col. 7 lines 27-47).

15. Muramatsu further discloses first image forming means for forming the image data of the original on the obverse side of the medium; in Muramatsu' system, the image forming section 70, performs the image formation (col. 5 line 9).

16. Muramatsu further discloses second scanning means for scanning the second original in the scanning direction; in Muramatsu's system, the CCD 16 (figure 1) reads

the second original document and transmits the data to the image processing section 211 (col. 6 lines 17-21).

17. Muramatsu further discloses second recording means for recording the image data of the second original scanning; in Muramatsu's system, the image processing section 211 receives image data from the CCD 16 and then transmits the image data to the memory unit section (col. 6 lines 22-28). The image data is rotated as needed, so that binding margin can be properly disposed (as shown in figure 24).

18. Muramatsu further discloses second reading means for reading out the recorded image data without rotating the data or by rotating the data by 180 degrees; in Muramatsu's system, the image data of the second original is read out and its orientation is determined, if the orientation of the second original matches the first, then no rotation is performed, if it does not match, then a rotation of 180 degrees is performed (col. 11 lines 30-41). Muramatsu further discloses providing the data with a binding margin having a width in the transverse direction on the basis of the binding axis if the binding axis determined by determining means is disposed in the longitudinal direction or providing a binding margin having a width in the longitudinal direction on the basis of the binding axis if the binding axis determined by the determining means is disposed in the transverse direction, the first reading means performing control in reading such that a position of the binding margin on the obverse side is reversed to a position of the binding margin on the reverse side; in Muramatsu's system, when the image is read in, the read start position is changed based on the way the binding margin

is specified (as described above), in order to insert space for the binding margin at the appropriate location (col. 7 lines 27-47).

19. Muramatsu further discloses second image forming means for forming the image data of the original on the reverse side of the medium; in Muramatsu' system, the image forming section 70, performs the image formation (col. 5 line 9).

20. Muramatsu does not discloses expressly allowing the directions of the originals to be an automatic of a horizontally or vertically positioned original, a portrait of a horizontally positioned original, a landscape of a vertically positioned original, a landscape of a horizontally positioned original, and a portrait of a vertically positioned original.

21. Morikawa discloses allowing the directions of the originals to be an automatic of a horizontally or vertically positioned original, a portrait of a horizontally positioned original, a landscape of a vertically positioned original, a landscape of a horizontally positioned original, and a portrait of a vertically positioned original (as shown in figure 38).

22. Muramatsu and Morikawa are combinable because they are from the same field of endeavor, namely copiers.

23. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the copying system of Muramatsu to handle originals in all the orientations, as described by Morikawa.

24. The motivation for doing so would have been to allow Muramatsu's system to handle all possible orientations of original documents and thus output copies having the proper orientation.

25. Neither Muramatsu nor Morikawa discloses expressly that if the directions of reading for the originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then second reading means then reads the image data by rotating the data 180 degrees or if the directions of scanning of the originals are the landscape of the horizontally positioned original or the portrait of the vertically positioned original, then second reading means then reads the image data without any rotation.

26. However, Muramatsu discloses rotating the originals by 0, 90, 180 or 270 degrees to properly orient the copies (col. 11 lines 30-55). Muramatsu further discloses detecting the top and bottom of the original and the portrait and landscape orientation of the original (col. 10 lines 11-12). Thus based upon the settings of the position and orientation of the binding margin by the user, if the directions of scanning of the first and second originals are the landscape of the horizontally positioned original, the portrait of the vertically positioned original, or the automatic of the horizontally or vertically positioned original no rotation would be performed, or if the directions of scanning of the first and second originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then a rotation of 180 degrees is performed (col. 11 lines 30-41).

27. Thus, it would be obvious to a person of ordinary skill in the art to force the system of Muramatsu to rotate originals that are the portrait of the horizontally positioned original or the landscape of the vertically positioned original by 180 degrees and originals that are the landscape of the horizontally positioned original or the portrait of the vertically positioned original by 0 degrees, in order to ensure that the binding axis was inserted in the proper places on the obverse and reverse side of the images.

28. In accordance with claims 2 and 6, Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

29. In accordance with claims 3 and 7, Morikawa further discloses allowing the directions of the originals to be portrait of a horizontally positioned original, landscape of a vertically positioned original, landscape of a horizontally positioned original, and portrait of a vertically positioned original (figure 38).

30. Neither Muramatsu nor Morikawa discloses expressly that if the directions of reading for the originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then second reading means then reads the image data by rotating the data 180 degrees or if the directions of scanning of the originals are the landscape of the horizontally positioned original or the portrait of the vertically positioned original, then second reading means then reads the image data without any rotation.

31. However, Muramatsu discloses rotating the originals by 0, 90, 180 or 270 degrees to properly orient the copies (col. 11 lines 30-55). Muramatsu further discloses detecting the top and bottom of the original and the portrait and landscape orientation of the original (col. 10 lines 11-12). Thus based upon the settings of the position and orientation of the binding margin by the user, if the directions of scanning of the first and second originals are the landscape of the horizontally positioned original, the portrait of the vertically positioned original, or the automatic of the horizontally or vertically positioned original no rotation would be performed, or if the directions of scanning of the first and second originals are the portrait of the horizontally positioned original or the landscape of the vertically positioned original, then a rotation of 180 degrees is performed (col. 11 lines 30-41)

32. Thus, it would be obvious to a person of ordinary skill in the art to force the system of Muramatsu to rotate originals that are the portrait of the horizontally positioned original or the landscape of the vertically positioned original by 180 degrees and originals that are the landscape of the horizontally positioned original or the portrait of the vertically positioned original by 0 degrees, in order to ensure that the binding axis was inserted in the proper places on the obverse and reverse side of the images.

33. In accordance with claims 4 and 8, Muramatsu further discloses allowing the first and second recording means to record the image data of the first and second originals by subjecting the image data to a rotation conversion (figure 24 and col. 11 lines 35-41).

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl R. Reitz whose telephone number is (703) 305-8696. The examiner can normally be reached on Monday-Friday 8:00-4:30.
37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 305-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
38. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

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